



PATENT
Attorney Docket No.: SAM-0201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Jong-hyon Ahn

Examiner: Hu, Shouxiang

Serial No.: 09/879,556

Group Art Unit: 2811

Filing Date: June 12, 2001

Title: METAL INTERCONNECT LAYER OF SEMICONDUCTOR DEVICE AND
METHOD FOR FORMING A METAL INTERCONNECT LAYER

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Post Office as First Class Mail on the date indicated below in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

May 19, 2003
Date

Lisa Sanders
Lisa Sanders

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

AMENDMENT TRANSMITTAL

Sir:

1. Transmitted herewith is an amendment for this application.

STATUS

2. Applicant is

- ☐ a small entity. A verified statement:
☐ is attached.
☐ was already filed.
☒ other than small entity.

EXTENSION OF TERM

3. The proceedings herein are for a patent application and the provisions of 37 CFR 1.136 apply.

- (a) ☐ Applicant petitions for an extension of time under 37 CFR 1.136

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Extension (months)	Fee for other than <u>small entity</u>	Fee for <u>small entity</u>
<input type="checkbox"/> one month	\$110.00	\$55.00
<input type="checkbox"/> two months	\$410.00	\$205.00
<input type="checkbox"/> three months	\$930.00	\$465.00
<input type="checkbox"/> four months	\$1,450.00	\$725.00

Fee \$ _____

If an additional extension of time is required, please consider this a petition therefor.

☐ An extension for _____ months has already been secured and the fee paid therefor of \$ _____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ _____

OR

(b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

FEE FOR CLAIMS

4. The fee for claims (37 CFR 1.16(b)-(d)) has been calculated as shown below:

CLAIMS AS AMENDED						
	(1)		(2)	(3)		
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT NUMBER EXTRA	RATE	FEE
TOTAL CLAIMS	42	minus	42	0	x \$18	\$0
INDEPENDENT CLAIMS	6	minus	6	0	x \$84	\$0
MULTIPLE DEPENDENT CLAIM ADDED	No				\$280	
				TOTAL		\$0
If applicant has small entity status under 37 CFR 1.9 and 1.27, then divide total fee by 2 and enter amount here.				SMALL ENTITY TOTAL		

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(c) ☒ No additional fee for claims is required.

OR

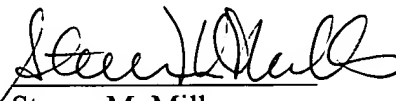
(d) ☐ Total additional fee for claims required \$ _____

FEE PAYMENT

5. ☐ Attached is a check in the sum of \$ _____
☐ Charge Deposit Account No. _____ the sum of \$ _____.
A duplicate of this transmittal is attached.

Respectfully submitted,

Date: May 19, 2003
Mills & Ondello LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900
Facsimile: (617) 742-7774


Steven M. Mills
Registration Number 36,610
Attorney for Applicant

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TRANSMITTAL LETTER

Sir:

Enclosed herewith for filing in the above-identified patent application please find the following listed items:

1. Amendment Transmittal;
2. Amendment after Final in response to Office Action mailed on March 19, 2003; and
3. Return Postcard.

In connection with the foregoing matter, please charge any additional fees which may be due, or credit any overpayment, to Deposit Account Number 50-1798. A duplicate copy of this letter is provided for this purpose.

Respectfully submitted,

Date: May 19, 2003
Mills & Onello LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
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Steven M. Mills
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Registration Number 36,610
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AMENDMENT AFTER FINAL REJECTION

Sir:

This is in response to the final Office Action mailed on March 19, 2003. It is requested that the following amendments be entered and that the following remarks be considered.

Please amend the application as follows:

In the Claims

Please amend the claims as follows:

1. (Twice Amended) A metal interconnect structure for a semiconductor device, comprising:
a trench formed in an interlevel dielectric (ILD) film, the trench having sidewalls in the ILD film which are formed to define two cross-sectional portions of the trench, a lower portion of the trench having sidewalls which define a first cross-sectional width of

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